

BEFORE THE  
**Federal Communications Commission**

WASHINGTON, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of	)	
	)	
Satellite Delivery of Network Signals	)	CS Docket No. 98-201
to Unserved Households for	)	RM No. 9335
Purposes of the Satellite Home	)	RM No. 9345
Viewer Act	)	
	)	
Part 73 Definition and Measurement	)	
of Signals of Grade B Intensity	)	
	)	
To: The Commission	)	

**COMMENTS OF  
THE NATIONAL RURAL TELECOMMUNICATIONS COOPERATIVE  
IN SUPPORT OF PETITIONS FOR RECONSIDERATION OF  
DIRECTV, INC. AND ECHOSTAR COMMUNICATIONS CORPORATION**

Pursuant to Section 1.429 of the Commission's Rules and Regulations, the National Rural Telecommunications Cooperative ("NRTC"), by its attorneys, hereby submits Comments in support of the Petitions for Reconsideration filed by DIRECTV, Inc. ("DIRECTV") and EchoStar Communications Corporation ("EchoStar") of the Commission's Report and Order ("Order" or "Grade B Order") in the above-captioned proceeding.<sup>1/</sup> NRTC initiated this proceeding on July 8, 1998, by petitioning the Commission to consider the matter of defining Grade B for purposes of the Satellite Home Viewer Act ("SHVA") so as to prevent the massive termination of satellite network service to millions of satellite subscribers as a result of the then-imminent Preliminary

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<sup>1/</sup> Public Notice of DIRECTV and EchoStar Petitions, 64 Fed. Reg. 15755 (April 1, 1999). The DIRECTV and EchoStar Petitions seek reconsideration of *Satellite Delivery of Network Signals to Unserved Households for Purposes of the Satellite Home Viewer Act; Part 73 Definition and Measurement of Signals of Grade B Intensity*, CS Docket No. 98-201, Report and Order (rel. Feb. 2, 1999).

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Injunction of the Miami District Court.<sup>2/</sup> The Commission's Order in this proceeding falls short of providing, to the full extent of its authority, practical rules and recommendations for the satellite and broadcast industries to use in determining a household's eligibility to receive distant network signals by satellite. Although additional Congressional action may be required, NRTC believes that the proposed modifications to the Commission's Grade B Order made by DIRECTV and EchoStar will provide an improved, more accurate and more consumer-friendly mechanism by which a household's served status may be ascertained.

## **I. BACKGROUND**

1. NRTC is a non-profit cooperative association comprised of 550 rural electric cooperatives and 279 rural telephone systems located throughout 48 states. NRTC's mission is to assist its members and affiliates in meeting the telecommunications needs of more than 30 million American consumers living in rural areas. Through an agreement with DIRECTV, NRTC, its members, and affiliated companies currently market and distribute up to 185 channels of popular cable and broadcast programming -- including network signals -- to over 1,000,000 rural households through DBS technology. NRTC is committed to extending the benefits of information, education and entertainment programming to rural America, on an affordable basis and in an easy and convenient manner, just as those services are available over cable in more populated areas of the

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<sup>2/</sup> CBS Inc., et al. v. PrimeTime24 Joint Venture, Order Affirming in Part and Reversing in Part Magistrate Judge Johnson's Report and Recommendation, 9 F.Supp.2d 1333 (S.D. FL. May 13, 1998).

country. NRTC's ability to provide these services is crucial to maintaining information access and a higher quality of life for rural America.

2. As previously noted, NRTC filed an Emergency Petition for Rulemaking to Define an Over-the-Air Signal of Grade B Intensity for Purposes of the Satellite Home Viewer Act ("Emergency Petition") on July 8, 1998. In its Emergency Petition, NRTC urged the Commission to address this crisis facing viewers across the country by establishing a consumer-friendly, understandable and fair definition of "an over-the air signal of Grade B intensity" for purposes of applying the "unserved household" restriction of the SHVA, 17 U.S.C. §119.

3. The "unserved household" crisis escalated as the Florida District Court issued its Preliminary Injunction, later followed by a Permanent Injunction.<sup>3/</sup> The court prohibited PrimeTime 24, the satellite carrier, from providing CBS and Fox network programming to any customer within an area shown on Longley-Rice propagation maps as receiving a signal of at least Grade B intensity from a CBS or Fox primary network station.<sup>4/</sup> The Court's Preliminary Injunction, which forced satellite carriers to terminate the CBS and FOX network service distributed by PrimeTime24 to subscribers signed up after March 11, 1997 (the date networks brought suit against PrimeTime24) and deemed ineligible for distant network service by the Miami District Court, became effective

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<sup>3/</sup> CBS Inc., et al., Supplemental Order Granting Plaintiff's Motion for Preliminary Injunction (S.D. FL. July 10, 1998) (Civil Action No. 96-3650-NESBITT)("Supplemental Order"); CBS Inc., et al., Final Judgement and Permanent Injunction, Case No. 96-3650-CIV-NESBITT (S.D. FL., December 30, 1998).

<sup>4/</sup> Supplemental Order at pp. 2-3.

February 28, 1999. The Permanent Injunction, which applies to satellite network subscribers signed up after March 11, 1997, will become effective on April 30, 1999.

4. In its Petition, NRTC pointed out that the Longley-Rice model used by the Miami District Court to determine subscriber eligibility for satellite network service under the SHVA was woefully inadequate. It did not accurately reflect which subscribers actually received an acceptable over-the-air picture from the local network affiliate. Moreover, the Grade B signal strength levels themselves were badly out-of-date. The Court's interpretation of "unserved household," based on the deficient signal strength levels and Longley-Rice model, would cause the unnecessary and inappropriate disenfranchisement of millions of satellite subscribers.

5. As a result of NRTC's Emergency Petition and support from the satellite industry and members of Congress, the Commission released a Notice of Proposed Rulemaking, supposedly to facilitate a means to determine which households do not in fact receive an acceptable local signal and should be entitled to receive distant network signals by satellite.

6. NRTC, believing that the NPRM presented a vehicle for the Commission to prevent the disenfranchisement of millions of households resulting from the Miami District Court's Preliminary Injunction, eagerly participated in this proceeding. NRTC joined members of the satellite industry and the Satellite Broadcasting and Communications Association ("SBCA") in making wide ranging, consumer-friendly recommendations to the Commission. NRTC, and the majority of the satellite industry, recommended that the Commission adopt a revised Grade B signal strength standard of

70.75 dBu for low-band VHF, 76.5 dBu for high-band VHF, and 92.75 dBu for UHF which reflects today's more sophisticated operational and viewing environment; adopt the Terrain Integrated Rough Earth Model ("TIREM") as a vastly improved predictive model to qualify viewers for distant network service by satellite; and adopt a revised measurement procedure to resolve disputes over a household's "served" status. The measurement procedure supported by NRTC and the satellite industry would feature: (1) measurements taken at an accessible location, as close as possible to the residence, at actual roof-top height; (2) signal strength readings taken approximately every thirty seconds for a period of five minutes; and (3) adjustment of those readings for signal strength loss due to the actual length of the antenna line and the actual number of splitters per household.

7. NRTC was understandably disappointed when the Commission released its Grade B Order. The only actual amendment to the FCC's rules made by the Grade B Order was the creation of a revised methodology for measuring signal strength at an individual household. The methodology, which requires a tester to make at least five measurements in clusters as close as possible to the location being tested, with the median value being taken as the signal intensity at the home, did not fundamentally affect the Florida District Court's ordered termination of satellite network service to households it has deemed "unserved." The new predictive model, "Individual Location Longley-Rice" ("ILLR") endorsed by the FCC, can only be used at the discretion of the satellite carriers, networks and local affiliates in determining the "served" status of satellite consumers and

potential satellite consumers. It will have little practical impact on the millions of households who have lost or will lose their network satellite service.

8. In its Order, the Commission declined to address the central issue before it, the definition of the Grade B signal strength standard for purposes of the SHVA, because it believed that it did not have the “authority” to create a special Grade B standard solely for purposes of the SHVA, and that such an approach would not be advisable. Instead, the Commission opted to make recommendations to Congress for changes in the copyright law to allow satellite companies to provide local television stations to local markets, to eliminate the 90-day waiting period for consumers to receive satellite network service after subscribing to cable, and to adopt a predictive model for creating rebuttable presumptions of service or lack of service, along with a loser pays mechanisms when the presumption is challenged.

9. NRTC believes the Commission currently has ample statutory authority to define “signal of Grade B intensity” and to make recommendations on the prediction and measurement of Grade B signal strength which will more accurately determine which households can receive a Grade B signal from the local network affiliate. These changes would have a significant, positive impact on consumers that have been deemed ineligible to receive distant network service by the Miami District Court. The recommendations made by DIRECTV and EchoStar are within the Commission’s authority and will more accurately determine consumer’s eligibility for satellite network service under the SHVA.

**II. The DIRECTV and EchoStar Petitions for Reconsideration Accurately Highlight Some of the Shortfalls of the Commission's Grade B Petition.**

10. DIRECTV urged the Commission to include in the ILLR model land use and land cover ("LULC") data to reflect the presence of signal propagation impediments such as vegetation and buildings. DIRECTV Petition, p. 2. DIRECTV noted that while the Commission recognized that LULC affected signal quality and should be included in the ILLR model, it did not include LULC in the ILLR model because it was "not aware of a standard means of including such information in the ILLR that has been accepted by the technical and scientific community." *Id.*, citing Grade B Order ¶83. DIRECTV pointed out that credible and useful LULC data is available in the Global Land Information System ("GLIS") database maintained by the United States Geological Survey ("USGS") and urged the Commission to incorporate the LULC information from the USGS GLIS database into ILLR model.

11. NRTC agrees that LULC affects signal quality and should be incorporated into the ILLR model. In its Comments and Reply Comments in this proceeding, NRTC supported use of the TIREM model for predicting reception of a Grade B signal because TIREM takes into consideration LULC information such as terrain, vegetation, land use and urbanization. Incorporating LULC data from the USGS GLIS database into ILLR model would improve reliability of the ILLR model.

12. EchoStar asked the Commission to reconsider its decision not to adopt new, SHVA-specific values for "Grade B intensity;" to institute further proceedings to determine how best to account for the effects of ghosting in the context of SHVA's

“unserved household” restriction; to reconsider or clarify its measurement methodology to reduce its complexity and cost; to give parties the flexibility to use either a gain antenna or a half-wave dipole to take measurements of multiple signals and clarify that testers can also use a half-wave dipole of fixed length with a calibration curve; and to reconsider its decision to adopt a 50% confidence factor as part of its model for predicting the presence of a Grade B signal at an individual household. EchoStar Petition, pp. 1-2.

13. NRTC agrees with EchoStar that the Commission has authority to establish SHVA-specific Grade B values and should promulgate rules providing for SHVA-specific Grade B signal strength values as described in NRTC’s Comments in this proceeding.<sup>5/</sup> NRTC filed its Petition because the current Grade B standard was established in the 1950's and does not reflect which households today can actually receive an acceptable over-the-air picture from the local network affiliates. Accordingly, NRTC joins EchoStar in urging the Commission to modernize its Grade B rules by defining SHVA-specific Grade B values so that they more accurately reflect signal strength actually required to receive an acceptable over-the-air picture.

14. EchoStar is concerned that the cost of the Commission’s testing methodology would be at least \$100 and could take about an hour to complete at each household. EchoStar Petition, p. 10. NRTC agrees that the high cost of testing will result in the test not being widely used and will frustrate the purpose of the test. NRTC urges

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<sup>5/</sup> See EchoStar Petition for Reconsideration at pp. 3-5 *citing*, Aquarius Marine Co. v. Pena, 64 F.3d 82, 88 (1<sup>st</sup> Cir. 1995); Third Report and Order on Reconsideration, CC Docket No. 92-297, 13 FCC Rcd 4856, 4884 (1998); Third Report and Order, GN Docket No. 93-252, 9 FCC Rcd. 7988, 8095, n. 434 (1994).



the Commission to reexamine steps to reduce testing costs and supports the cost reduction proposals made by EchoStar: (1) eliminate the requirement that the testing antenna be oriented separately for each station being measured; (2) eliminate the number of locations and the number of measurements required; (3) permit flexibility as to the type of antenna to be used in testing; and (4) clarify that testers can use a half-wave dipole of fixed length and adjust the results to the appropriate signal through the use of a calibration curve. Id., pp. 11-14.

15. Lastly, EchoStar requested that the Commission consider use of the 50% confidence factor in the predictive model. Id., p. 15. EchoStar suggested that instead of using the 50% confidence factor, the Commission should not permit a household to qualify as unserved unless it meets two conditions: (1) it *cannot* be predicted with 90% confidence as receiving 47 dBu *or more*; (2) it *can* be predicted with 90% confidence as receiving 70.75 dBu (for low-band VHF) *or less*. The second condition would cut off from eligibility for satellite service households that cannot be confidently predicted as receiving 70.75 dBu or less. Id., p. 18. NRTC agrees that the 50% confidence factor penalizes consumers. Accordingly, NRTC supports EchoStar's proposal for use of a 90% confidence factor with a cap.

### III. CONCLUSION

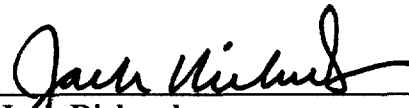
16. Rural consumers often reside on the fringes and outside of local stations' Grade B contours where reception of a Grade B signal, even with the most sophisticated antenna available, is spotty at best. They have been hardest hit by the Court-ordered enforcement of the SHVA. The Commission's testing method and predictive model,

which do not take into account the reality of television reception in rural areas, provide little relief. Defining a realistic, modern Grade B signal strength level for purposes of the SHVA is absolutely necessary and well within the Commission's singular expertise as the expert agency in telecommunications matter. The Commission is uniquely positioned to bridge the gap between hypothetically "served" households under the SHVA and households actually "served".

**WHEREFORE, THE PREMISES CONSIDERED,** the National Rural Telecommunications Cooperative urges the Commission to reconsider its Order in CS Docket No. 98-201 pursuant to suggestions made by DIRECTV and EchoStar and to make meaningful changes to its recommendation for predicting Grade B signal reception and its rules to measure Grade B signal strength.

**Respectfully submitted,**

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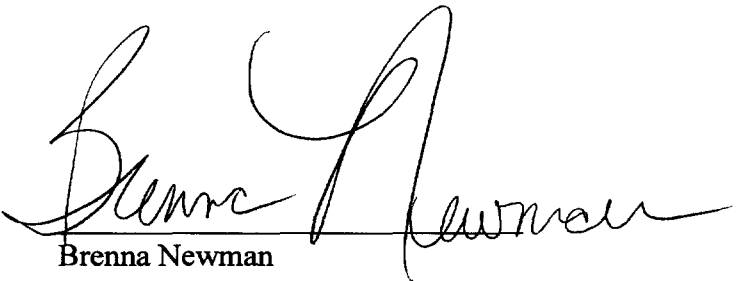
**Dated: April 16, 1999**

**CERTIFICATE OF SERVICE**

I, Brenna Newman, a legal secretary at the law firm of Keller & Heckman LLP, hereby certify that on this 16th day of April 1999, copies of the foregoing Comments of the National Rural Telecommunications Cooperative in Support of Petitions for Reconsideration of DIRECTV, Inc. and EchoStar Communications Corporation were sent by hand delivery to the following:

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